Grasslands – Managed Agricultural Lands

Definition

Grasslands are anthropogenic areas dominated (>50%) by noninvasive (but often non-native) grass with a lesser abundance of forbs. They are typically cultivated for livestock forage, and do not include fields of cereal grains.

Ecological Function

The primary function of grasslands is as habitat for species of birds that require grassland for breeding and foraging, particularly Bobolink, Eastern Meadowlark, and Savannah Sparrow. This element seeks to improve the favorability of existing agricultural grassland management for grassland birds, particularly to reduce the incidence of breeding-season mowing that causes substantial mortality for nesting birds. These areas also provide habitat for plants and numerous other species of wildlife that use grasslands for their life requirements.

Priority Target for an Ecologically Functional Landscape

All anthropogenic grasslands in Vermont are targets for improving grassland bird survival and productivity for as long as the grassland field remains in active agricultural use.

Highest Priority:
Regions that currently have high concentrations of grasslands: Champlain Valley biophysical region, the Northern Vermont Piedmont biophysical region, the Connecticut River region (within approximately 10 miles of the Connecticut River).

Guidelines for Maintaining Ecological Function

The management regime of grasslands is essential. Disturbance must be often enough to maintain quality grassland, and (optimally) remove thatch to allow vigorous growth. Management must not, however, destroy nests during the breeding season (generally, May to early August).

In Grassland Management areas, mowing or other management should take place after August 1, or practice "deferred mowing" where management takes place early in the breeding season then is withheld until after the end of the breeding season, to allow a window between for successful breeding. Grassland patches should be larger than 10 acres, which will meet the needs of bobolink and savannah sparrow and will contribute to the needs of other species. Patches that are blocky or circular have more interior grassland area and will support more birds. Trees within the grassland will generally lower the habitat use and should be absent or limited to a small number of individual trees (not a treeline or island). Patches of managed grassland that are smaller than the minimum size may provide habitat of a lower quality, but still have value, particularly if grouped near larger patches.

Restoration Needs

There are no restoration needs at this time. Efforts should focus on maintaining and improving grassland areas in active agricultural use, and support grass-based agriculture over intensive row crops or other land uses.
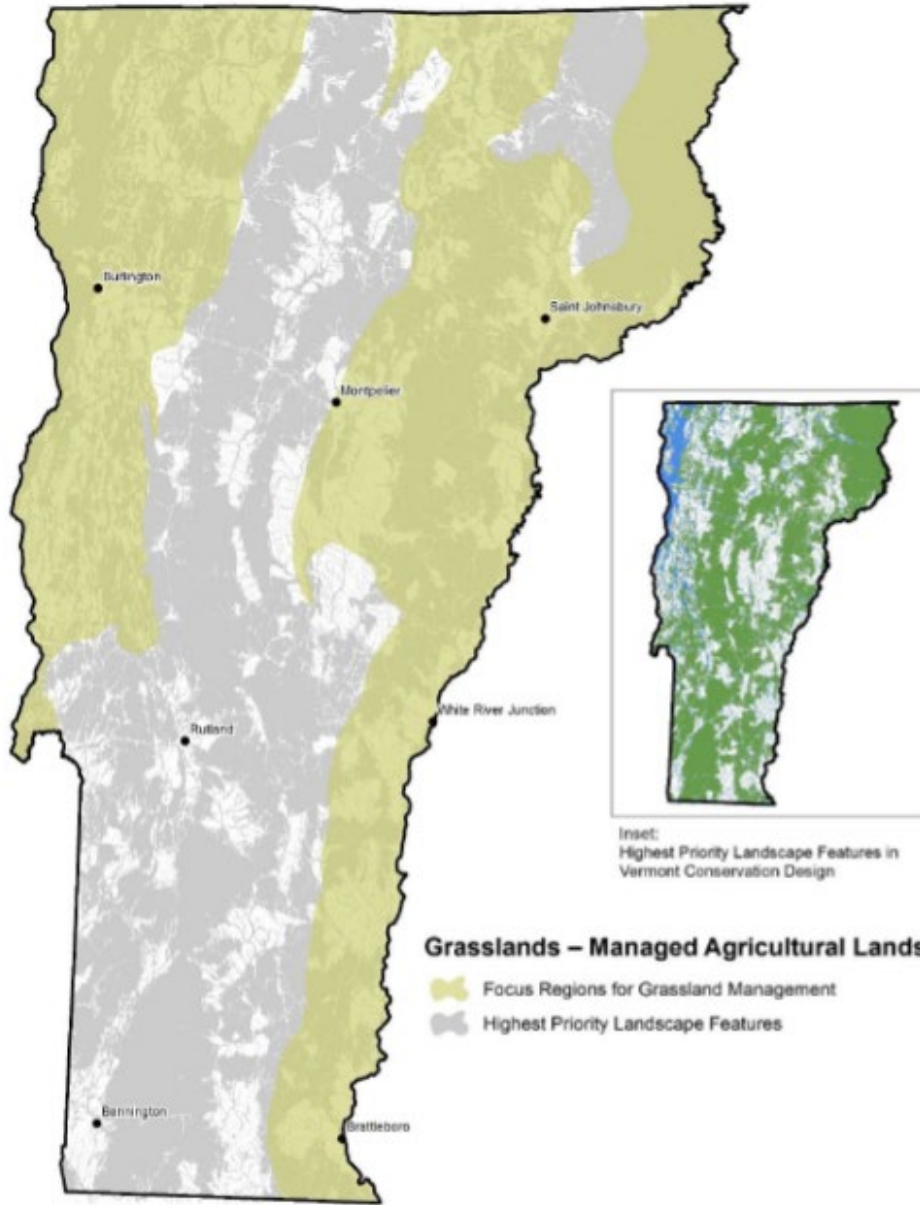
Mapping Comments

Grasslands are relatively widespread and may be ephemeral depending on agricultural activity. For this reason, grassland management targets are not mapped.

Methods and Rationale

The wildlife species that rely on grasslands are experiencing some of the gravest declines across the both the US and the northeast. Habitat loss and loss of functional habitat through agricultural intensification are primary threats to these species in Vermont. Maintaining and enhancing grasslands of sufficient quality, size, and arrangement will enable populations of birds, plants, and other animals to persist in Vermont into the future.

Map 10: Grassland Management Focus Areas

Inset:
Highest Priority Landscape Features in
Vermont Conservation Design

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Focus Regions for Grassland Management

Highest Priority Landscape Features

Management is targeted outside of the VCD Ecologically Functional Landscape.

For more information

For more information specific to this component, contact Vermont Fish & Wildlife Department, Jens Hilke, at 802-461-6791, jens.hilke@vermont.gov and Bob Zaino, at 802-476-0128, Robert.Zaino@vermont.gov